



## Hyundai/Kia Data Interface with SWC 2010-2013

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### INTERFACE FEATURES

- Provides NAV outputs (park brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Designed for amplified models
- Retains the factory AUX-IN jack
- Retains the factory backup camera
- Retains balance
- Micro-B USB updatable

### INTERFACE COMPONENTS

- AX-HYKIA4-SWC interface • AX-HYKIA4-SWC harness
- AX-HYKIA-SPDIF interface • 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads

### APPLICATIONS

Hyundai		Kia	
Tucson †	2010-2013	Forte ‡	2010-2013
		Sorento †	2011-2013

† With NAV

‡ With auto climate control or NAV

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### TOOLS REQUIRED

- Crimping tool and connectors, or solder gun, solder, and heat shrink
- Tape
- Wire cutter
- Zip ties
- Small flat-blade screwdriver

**Attention!** Let the vehicle sit with the key out of the ignition for a few minutes before removing the factory radio. When testing the aftermarket equipment, ensure that all factory equipment is connected before cycling the key to ignition.

## CONNECTIONS

### From the 16-pin harness with stripped leads to the aftermarket radio:

- Connect the **Red** wire to the accessory wire.
- Connect the **Blue/White** wire to the amp turn-on wire.
- Connect the **Gray** wire to the right front positive speaker output.
- Connect the **Gray/Black** wire to the right front negative speaker output.
- Connect the **White** wire to the left front positive speaker output.
- Connect the **White/Black** wire to the left front negative speaker output.

The following (1) wire is only for a multimedia/navigation radio that requires this wire.

- Connect the **Light Green** wire to the parking brake wire.
- Tape off and disregard the following (8) wires, they will not be used in this application:  
**Blue/Pink, Brown, Green, Green/Black, Green/Purple, Orange/White, Purple, Purple/Black**

### From the AX-HYKIA4-SWC harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Blue** wire to the power antenna wire.
- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.

The following (2) wires are only for a multimedia/navigation radio that requires these wires.

- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- Connect the **Green/Purple** wire to the reverse wire.
- If the factory AUX-IN jack is desired to be retained, connect the **Red & White** RCA jacks to the audio AUX-IN jacks.
- Connect the **Yellow** RCA jack to the backup camera input.

### 3.5mm jack steering wheel control retention:

The 3.5mm jack is to be used to retain audio controls on the steering wheel control.

- **For the radios listed below:** Connect the *female 3.5mm connector with stripped leads*, to the male 3.5mm SWC jack from the AX-HYKIA4-SWC harness. Any remaining wires tape off and disregard.

- **Eclipse:** Connect the steering wheel control wire, normally **Brown**, to the **Brown/White** wire from the connector. Then connect the remaining steering wheel control wire, normally **Brown/White**, to the **Brown** wire from the connector.
- **Metra OE:** Connect the steering wheel control Key 1 wire (**Gray**) to the **Brown** wire.
- **Kenwood or select JVC with a steering wheel control wire:** Connect the **Blue/Yellow** wire to the **Brown** wire.

**Note:** If the **Kenwood** radio auto detects as a JVC, manually set the radio type to **Kenwood**. See the instructions under **Changing Radio Type**.

- **XITE:** Connect the steering wheel control SWC-2 wire from the radio to the **Brown** wire.
- **Parrot Asteroid Smart or Tablet:** Connect the 3.5mm jack to the AX-SWC-PARROT (sold separately). Then connect the 4-pin connector from the AX-SWC-PARROT to the radio.  
**Note:** The radio must be updated to rev. 2.1.4 or higher software.
- **Universal “2 or 3 wire” radio:** Connect the steering wheel control wire, referred to as Key-A or SWC-1, to the **Brown** wire from the connector. Then connect the remaining steering wheel control wire, referred to as Key-B or SWC-2, to the **Brown/White** wire from the connector. If the radio comes with a third wire for ground, disregard this wire.

**Note:** After the interface has been programmed to the vehicle, refer to the manual provided with the radio for assigning the SWC buttons. Contact the radio manufacturer for more information.

- **For all other radios:** Connect the 3.5mm jack from the AX-HYKIA4-SWC harness to the jack on the radio designated for an external steering wheel control interface. Please refer to the aftermarket radios manual if in doubt as to where the 3.5mm jack goes to.

## INSTALLATION

### With the key in the off position:

1. Connect the 16-pin harness with stripped leads, and the AX-HYKIA4-SWC harness, to the AX-HYKIA4-SWC interface.
2. Connect the AX-HYKIA4-SPDIF interface to the 14-pin connector from the HYKIA4-SWC harness.

**Attention!** Do not connect the AX-HYKIA4-SWC harness to the wiring harness in the vehicle just yet.

**Attention!** If retaining steering wheel controls, ensure that the jack/wire is connected to the radio before proceeding. If this step is skipped, the AX-HYKIA4-SWC interface will need to be reset for the steering wheel controls to function.

## PROGRAMMING

For the steps below, the L.E.D. located inside the **AX-HYKIA4-SWC** interface can only be seen while active. The interface does not need to be opened to see the L.E.D.

1. Start the vehicle.
2. Connect the AX-HYKIA4-SWC harness to the wiring harness in the vehicle.
3. The L.E.D. will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.
4. The L.E.D. will then flash **Red** up to (18) times indicating which radio is connected to the interface, and then turn off for a couple of seconds. Pay close attention to how many red flashes there are. This will help in troubleshooting, if need be. Refer to the L.E.D. feedback section for more information.

## PROGRAMMING (CONT.)

5. After a couple seconds the L.E.D. will turn on solid **Red** while the interface auto detects the vehicle. The radio will shut off at this point. This process should take 5 to 30 seconds.
6. Once the vehicle has been auto detected by the interface, the L.E.D. will turn on solid **Green**, and the radio will come back on, indicating programming was successful.
7. Cycle the key off, then back on. If the driver's door is closed, open and close the door.
8. Test all functions of the installation for proper operation, before reassembling the dash.
9. If the interface fails to function, refer to the **Troubleshooting** section.

**Note:** The L.E.D. will turn on solid **Green** for a moment, and then turn off under normal operation after the key has been cycled.

## AUDIO LEVEL ADJUSTMENT

1. With the vehicle and radio turned on, turn the volume up 3/4 of the way.
2. With a small flat-blade screwdriver, adjust the potentiometer clockwise to raise the audio level; counter clockwise to lower the audio level.
3. Once at a desired level, audio adjustment is complete.

# STEERING WHEEL CONTROL SETTINGS

## L.E.D. feedback

The (18) **Red** L.E.D. flashes represent the radio the **AX-HYKIA4-SWC** interface believes it's connected to. Each flash represents a different radio Manufacturer. For example, if you are installing a JVC radio, the **AX-HYKIA4-SWC** interface will flash **Red** (5) times, and then stop. Following is a legend that dictates which radio Manufacturer corresponds to which flash.

## L.E.D. feedback legend

Flash Count	Radio
1	Eclipse (type 1) †
2	Kenwood ‡
3	Clarion (type 1) †
4	Sony / Dual
5	JVC
6	Pioneer / Jensen
7	Alpine *
8	Visteon
9	Valo

Flash Count	Radio
10	Clarion (type 2) †
11	Metra OE
12	Eclipse (type 2) †
13	LG
14	Parrot **
15	XITE
16	Philips
17	TBA
18	JBL

\* If the **AX-HYKIA4-SWC** interface flashes **Red** (7) times, and you do not have an **Alpine** radio connected to it, that means the **AX-HYKIA4-SWC** interface does not detect a radio connected to it. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

\*\* The **AX-SWC-PARROT** is required (sold separately). Also, the Parrot radio must be updated to rev. 2.1.4 or higher through [www.parrot.com](http://www.parrot.com).

† If you have a **Clarion** radio and the steering wheel controls do not work, change the radio type to the other **Clarion** radio type; same for **Eclipse**. The following section explains how to do this.

‡ If you have a **Kenwood** radio and the L.E.D. feedback comes back showing as a **JVC** radio, change the radio type to **Kenwood**. The following section explains how to do this.

**Attention:** The **Axxess Updater App** can also be used to program the following (3) sub-sections as well, pending that the **AX-HYKIA4-SWC** interface has been programmed and is functional.

## Changing radio type

If the L.E.D. flashes do not match the radio you have connected, you must manually program the **AX-HYKIA4-SWC** interface to tell it what radio it is connected to.

1. After (3) seconds of turning the key on, press and hold the **Volume Down** button on the steering wheel until the L.E.D. in the **AX-HYKIA4-SWC** interface goes solid.
2. Release the **Volume Down** button; the L.E.D. will go out indicating the **AX-HYKIA4-SWC** interface is in **Changing Radio Type** mode.
3. Refer to the **Radio Legend** to know which radio number you would like to have programmed.
4. Press and hold the **Volume Up** button until the L.E.D. goes solid, then release. Repeat this step for the desired radio number you have selected.
5. Once the desired radio number has been selected, press and hold the **Volume Down** button on the steering wheel until the L.E.D. goes solid. The L.E.D. will remain on for about (3) seconds while it stores the new radio information.
6. Once the L.E.D. goes out, the **Changing Radio Type** mode will then end. You can now test the steering control wheel controls.

**Note:** If at any time the user fails to press any button for a period longer than (10) seconds, this process will abort.

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS (CONT.)

### Radio legend

Radio #	Radio
1	Eclipse (type 1)
2	Kenwood
3	Clarion (type 1)
4	Sony / Dual
5	JVC
6	Pioneer / Jensen
7	Alpine
8	Visteon
9	Valor

Radio #	Radio
10	Clarion (type 2)
11	Metra OE
12	Eclipse (type 2)
13	LG
14	Parrot
15	XITE
16	Philips
17	TBA
18	JBL

### Remapping the steering wheel control buttons

Once the **AX-HYKIA4-SWC** interface has been programmed, the button assignment for the steering wheel controls may be reassigned if so desired. For example, if **Seek Up** is preferred to be **Mute** instead. Follow the steps below to remap the steering wheel control buttons.

1. Ensure that the **AX-HYKIA4-SWC** interface is visible so you can see the L.E.D. flashes to confirm button recognition.  
**Tip:** Turning the radio off is recommended.
2. Within the first twenty seconds of turning the ignition on, press and hold the **Volume Up** button on the steering wheel until the L.E.D. goes solid.
3. Release the **Volume Up** button, the L.E.D. will then go out. The **Volume Up** button has now been programmed.

4. Follow the list in the **Button Function Legend** to reference the order in which the steering wheel control buttons need to be programmed.

**Note:** If the next function on the list is not present on the steering wheel, press the Volume Up button for (1) second until the L.E.D. comes on to skip that function, then release the **Volume Up** button. This will tell the **AX-HYKIA4-SWC** interface that this function is not available, and to move on to the next function.

5. To complete the remapping process, press and hold the **Volume Up** button until the L.E.D. in the **AX-HYKIA4-SWC** interface goes out.

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS (CONT.)

### Button function legend

Function #	Function
1	Volume-Up
2	Volume-Down
3	Seek-Up/Next
4	Seek-Down/Prev
5	Source/Mode
6	Mute
7	Preset-Up
8	Preset-Down
9	Power

Function #	Function
10	Band
11	Play/Enter
12	PTT (Push to Talk)
13	On-Hook
14	Off-Hook
15	Fan-Up*
16	Fan-Down*
17	Temp-Up*
18	Temp-Down*

\* Not applicable in this application

**Note:** Some radios may not have these commands. Please refer to the manual provided with the radio, or contact the radio Manufacturer for specific commands recognized by that particular radio.

### Dual assignment instructions (long button press)

The **AX-HYKIA4-SWC** interface has the capability to assign (2) functions to a single button, except **Volume Up** and **Volume Down**. Follow the steps below to program the button(s) to the desired setting.

**Note:** **Seek Up** and **Seek Down** come pre-programmed as **Preset Up** and **Preset Down** for a long button press.

1. Turn the key to ignition but do not start the vehicle.
2. Press and hold the desired steering wheel control button for (10) seconds, or until the L.E.D. flashes rapidly. At this point release the button; the L.E.D. will then go solid.
3. Press and release the **Volume Up** button the number of times corresponding to the new button number selected. Refer to the **Dual Assignment Legend**. The L.E.D. will flash rapidly while the **Volume Up** button is being pressed, and then go back to a solid L.E.D. once released. Proceed to the next step once the **Volume Up** button has been pressed the desired number of times.  
**Caution:** If more than (10) seconds elapses between pressing the **Volume Up** button, this procedure will abort, and the L.E.D. will go out.
4. Press the desired button to store it to memory. The L.E.D. will now go out indicating the new information has been stored to memory.

**Note:** These steps must be repeated for each button desired to assign a dual assignment feature to. To reset a button back to its default state, repeat Step 1, then press the **Volume Down** button. The L.E.D. will go out, and the dual assignment feature for that button will be erased.

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS (CONT.)

### Dual assignment legend

Function #	Function
1	Not allowed
2	Not allowed
3	Seek-Up/Next
4	Seek-Down/Prev
5	Mode/Source
6	ATT/Mute
7	Preset-Up
8	Preset-Down
9	Power

Function #	Function
10	Band
11	Play/Enter
12	PTT
13	On-Hook
14	Off-Hook
15	Fan-Up*
16	Fan-Down*
17	Temp-Up*
18	Temp-Down*

\* Not applicable in this application

## TROUBLESHOOTING

### Resetting the AX-HYKIA4-SWC

1. The **Blue** reset button is located inside the **AX-HYKIA4-SWC** interface, between the two connectors. The button is accessible outside the **AX-HYKIA4-SWC** interface, no need to open the **AX-HYKIA4-SWC** interface.
2. Press and hold the reset button for two seconds, then let go to reset the **AX-HYKIA4-SWC** interface.
3. Refer to **Programming** from this point.



# AX-HYKIA4-SWC

INSTALLATION INSTRUCTIONS



If you are having difficulties with the installation of this product, contact our Tech Support line either by phone at **1-800-253-TECH**, or email at **techsupport@metra-autosound.com**. Before doing so, look over the instruction booklet a second time and ensure that the installation was performed exactly as the instruction booklet is stated. Have the vehicle apart and ready to perform troubleshooting steps before contacting Metra/Axxess Tech Support.



### KNOWLEDGE IS POWER

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